Calendar No. 388

107TH CONGRESS 2D SESSION

S. 2487

To provide for global pathogen surveillance and response.

IN THE SENATE OF THE UNITED STATES

May 9, 2002

Mr. Biden (for himself, Mr. Helms, Mr. Kennedy, and Mr. Frist) introduced the following bill; which was read twice and referred to the Committee on Foreign Relations

May 23, 2002 Reported by Mr. BIDEN, without amendment

A BILL

To provide for global pathogen surveillance and response.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE.
- 4 This Act may be cited as the "Global Pathogen Sur-
- 5 veillance Act of 2002".
- 6 SEC. 2. FINDINGS; PURPOSE.
- 7 (a) FINDINGS.—Congress makes the following find-
- 8 ings:

- 1 (1) Bioterrorism poses a grave national security
 2 threat to the United States. The insidious nature of
 3 the threat, the likely delayed recognition in the event
 4 of an attack, and the underpreparedness of the do5 mestic public health infrastructure may produce cat6 astrophic consequences following a biological weap7 ons attack upon the United States.
 - (2) A contagious pathogen engineered as a biological weapon and developed, tested, produced, or released in another country can quickly spread to the United States. Given the realities of international travel, trade, and migration patterns, a dangerous pathogen released anywhere in the world can spread to United States territory in a matter of days, before any effective quarantine or isolation measures can be implemented.
 - (3) To effectively combat bioterrorism and ensure that the United States is fully prepared to prevent, diagnose, and contain a biological weapons attack, measures to strengthen the domestic public health infrastructure and improve domestic surveillance and monitoring, while absolutely essential, are not sufficient.
 - (4) The United States should enhance cooperation with the World Health Organization, regional

- health organizations, and individual countries to help detect and quickly contain infectious disease outbreaks or bioterrorism agents before they can spread.
 - (5) The World Health Organization (WHO) has done an impressive job in monitoring infectious disease outbreaks around the world, particularly with the establishment in April 2000 of the Global Outbreak Alert and Response network.
 - (6) The capabilities of the World Health Organization are inherently limited in that its disease surveillance and monitoring is only as good as the data and information the World Health Organization receives from member countries and are further limited by the narrow range of diseases (plague, cholera, and yellow fever) upon which its disease surveillance and monitoring is based, and the consensus process used by the World Health Organization to add new diseases to the list. Developing countries in particular often cannot devote the necessary resources to build and maintain public health infrastructures.
 - (7) In particular, developing countries could benefit from—

1	(A) better trained public health profes-
2	sionals and epidemiologists to recognize disease
3	patterns;
4	(B) appropriate laboratory equipment for
5	diagnosis of pathogens;
6	(C) disease reporting that is based or
7	symptoms and signs (known as "syndrome sur-
8	veillance") enabling the earliest possible oppor-
9	tunity to conduct an effective response;
10	(D) a narrowing of the existing technology
11	gap in syndrome surveillance capabilities, based
12	on reported symptoms, and real-time informa-
13	tion dissemination to public health officials; and
14	(E) appropriate communications equip-
15	ment and information technology to efficiently
16	transmit information and data within national
17	and regional health networks, including inex-
18	pensive, Internet-based Geographic Information
19	Systems (GIS) for early recognition and diag-
20	nosis of diseases.
21	(8) An effective international capability to mon-
22	itor and quickly diagnose infectious disease out
23	breaks will offer dividends not only in the event of
24	biological weapons development, testing, production

and attack, but also in the more likely cases of natu-

- rally occurring infectious disease outbreaks that
 could threaten the United States. Furthermore, a
 robust surveillance system will serve to deter terrorist use of biological weapons, as early detection
 will help mitigate the intended effects of such malevolent uses.
- 7 (b) Purpose.—The purposes of this Act are as fol-8 lows:
 - (1) To enhance the capability of the international community, through the World Health Organization and individual countries, to detect, identify, and contain infectious disease outbreaks, whether the cause of those outbreaks is intentional human action or natural in origin.
 - (2) To enhance the training of public health professionals and epidemiologists from eligible developing countries in advanced Internet-based syndrome surveillance systems, in addition to traditional epidemiology methods, so that they may better detect, diagnose, and contain infectious disease outbreaks, especially those due to pathogens most likely to be used in a biological weapons attack.
 - (3) To provide assistance to developing countries to purchase appropriate public health labora-

- tory equipment necessary for infectious disease sur veillance and diagnosis.
 - (4) To provide assistance to developing countries to purchase appropriate communications equipment and information technology, including appropriate computer equipment and Internet connectivity mechanisms, to facilitate the exchange of Geographic Information Systems-based syndrome surveillance information and to effectively gather, analyze, and transmit public health information for infectious disease surveillance and diagnosis.
 - (5) To make available greater numbers of United States Government public health professionals to international health organizations, regional health networks, and United States diplomatic missions where appropriate.
 - (6) To establish "lab-to-lab" cooperative relationships between United States public health laboratories and established foreign counterparts.
 - (7) To expand the training and outreach activities of overseas United States laboratories, including Centers for Disease Control and Prevention and Department of Defense entities, to enhance the public health capabilities of developing countries.

1 (8) To provide appropriate technical assistance 2 to existing regional health networks and, where ap-3 propriate, seed money for new regional networks.

4 SEC. 3. DEFINITIONS.

5 In this Act:

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- 6 (1) ELIGIBLE DEVELOPING COUNTRY.—The
 7 term "eligible developing country" means any devel8 oping country that—
 - (A) has agreed to the objective of fully complying with requirements of the World Health Organization on reporting public health information on outbreaks of infectious diseases;
 - (B) has not been determined by the Secretary, for purposes of section 40 of the Arms Export Control Act (22 U.S.C. 2780), section 620A of the Foreign Assistance Act of 1961 (22 U.S.C. 2371), or section 6(j) of the Export Administration Act of 1979 (50 U.S.C. App. 2405), to have repeatedly provided support for acts of international terrorism, unless the Secretary exercises a waiver certifying that it is in the national interest of the United States to provide assistance under the provisions of this Act; and

- 1 (C) is a state party to the Biological 2 Weapons Convention.
 - (2) ELIGIBLE NATIONAL.—The term "eligible national" means any citizen or national of an eligible developing country who does not have a criminal background, who is not on any immigration or other United States watch list, and who is not affiliated with any foreign terrorist organization.
 - (3) International Health organization.—
 The term "international health organization" includes the World Health Organization and the Pan American Health Organization.
 - (4) Laboratory.—The term "laboratory" means a facility for the biological, microbiological, serological, chemical, immuno-hematological, hematological, biophysical, cytological, pathological, or other examination of materials derived from the human body for the purpose of providing information for the diagnosis, prevention, or treatment of any disease or impairment of, or the assessment of the health of, human beings.
 - (5) Secretary.—Unless otherwise provided, the term "Secretary" means the Secretary of State.
 - (6) SELECT AGENT.—The term "select agent" has the meaning given such term for purposes of

- 1 section 72.6 of title 42, Code of Federal Regula-
- 2 tions.
- 3 (7) Syndrome surveillance.—The term
- 4 "syndrome surveillance" means the recording of
- 5 symptoms (patient complaints) and signs (derived
- 6 from physical examination) combined with simple ge-
- 7 ographic locators to track the emergence of a disease
- 8 in a population.

9 SEC. 4. PRIORITY FOR CERTAIN COUNTRIES.

- 10 Priority in the provision of United States assistance
- 11 for eligible developing countries under all the provisions
- 12 of this Act shall be given to those countries that permit
- 13 personnel from the World Health Organization and the
- 14 Centers for Disease Control and Prevention to investigate
- 15 outbreaks of infectious diseases on their territories.

16 SEC. 5. RESTRICTION.

- 17 Notwithstanding any other provision of this Act, no
- 18 foreign nationals participating in programs authorized
- 19 under this Act shall have access, during the course of such
- 20 participation, to select agents that may be used as, or in,
- 21 a biological weapon, except in a supervised and controlled
- 22 setting.

23 SEC. 6. FELLOWSHIP PROGRAM.

- 24 (a) Establishment.—There is established a fellow-
- 25 ship program (in this section referred to as the "pro-

- 1 gram") under which the Secretary, in consultation with
- 2 the Secretary of Health and Human Services, and, subject
- 3 to the availability of appropriations, award fellowships to
- 4 eligible nationals of developing countries to pursue public
- 5 health education or training, as follows:
- 6 (1) Master of Public Health Degree.—
- 7 Graduate courses of study leading to a master of
- 8 public health degree with a concentration in epidemi-
- 9 ology from an institution of higher education in the
- 10 United States with a Center for Public Health Pre-
- paredness, as determined by the Centers for Disease
- 12 Control and Prevention.
- 13 (2) Advanced public health epidemiology
- 14 TRAINING.—Advanced public health training in epi-
- demiology for public health professionals from eligi-
- ble developing countries to be carried out at the
- 17 Centers for Disease Control and Prevention (or
- equivalent State facility), or other Federal facility
- 19 (excluding the Department of Defense or United
- States National Laboratories), for a period of not
- less than 6 months or more than 12 months.
- 22 (b) Specialization in Bioterrorism.—In addition
- 23 to the education or training specified in subsection (a),
- 24 each recipient of a fellowship under this section (in this
- 25 section referred to as a "fellow") may take courses of

1 study at the Centers for Disease Control and Prevention

2 or at an equivalent facility on diagnosis and containment

3 of likely bioterrorism agents.

(c) Fellowship Agreement.—

- (1) IN GENERAL.—In awarding a fellowship under the program, the Secretary, in consultation with the Secretary of Health and Human Services, shall require the recipient to enter into an agreement under which, in exchange for such assistance, the recipient—
 - (A) will maintain satisfactory academic progress (as determined in accordance with regulations issued by the Secretary and confirmed in regularly scheduled updates to the Secretary from the institution providing the education or training on the progress of the recipient's education or training);
 - (B) will, upon completion of such education or training, return to the recipient's country of nationality or last habitual residence (so long as it is an eligible developing country) and complete at least four years of employment in a public health position in the government or a nongovernmental, not-for-profit entity in that country or, with the approval of the Secretary

1 and the government concerned, in an inter-2 national health organization; and

- (C) agrees that, if the recipient is unable to meet the requirements described in subparagraph (A) or (B), the recipient will reimburse the United States for the value of the assistance provided to the recipient under the fellowship, together with interest at a rate determined in accordance with regulations issued by the Secretary but not higher than the rate generally applied in connection with other Federal loans.
- (2) Waivers.—The Secretary may waive the application of paragraph (1)(B) and (1)(C) if the Secretary determines that it is in the national interest of the United States to do so.
- 17 (d) IMPLEMENTATION.—The Secretary, in consulta18 tion with the Secretary of Health and Human Services,
 19 is authorized to enter into an agreement with any eligible
 20 developing country under which the developing country
 21 agrees—
- 22 (1) to establish a procedure for the nomination 23 of eligible nationals for fellowships under this sec-24 tion;

- 1 (2) to guarantee that a fellow will be offered a 2 professional public health position within the devel-3 oping country upon completion of his studies; and
- (3) to certify to the Secretary when a fellow has concluded the minimum period of employment in a public health position required by the fellowship agreement, with an explanation of how the requirement was met.
- 9 (e) Participation of United States Citizens.—
- 10 On a case-by-case basis, the Secretary may provide for the
- 11 participation of United States citizens under the provi-
- 12 sions of this section if the Secretary determines that it
- 13 is in the national interest of the United States to do so.
- 14 Upon completion of such education or training, a United
- 15 States recipient shall complete at least five years of em-
- 16 ployment in a public health position in an eligible devel-
- 17 oping country or the World Health Organization.
- 18 SEC. 7. IN-COUNTRY TRAINING IN LABORATORY TECH-
- 19 NIQUES AND SYNDROME SURVEILLANCE.
- 20 (a) IN GENERAL.—In conjunction with the Centers
- 21 for Disease Control and Prevention and the Department
- 22 of Defense, the Secretary shall, subject to the availability
- 23 of appropriations, support short training courses in-coun-
- 24 try (not in the United States) to laboratory technicians
- 25 and other public health personnel (who are eligible per-

- 1 sons) from developing countries in laboratory techniques
- 2 relating to the identification, diagnosis, and tracking of
- 3 pathogens responsible for possible infectious disease out-
- 4 breaks. Training under this section may be conducted in
- 5 overseas facilities of the Centers for Disease Control and
- 6 Prevention or in Overseas Medical Research Units of the
- 7 Department of Defense, as appropriate. The Secretary
- 8 shall coordinate such training courses, where appropriate,
- 9 with the existing programs and activities of the World
- 10 Health Organization.
- 11 (b) Training in Syndrome Surveillance.—In
- 12 conjunction with the Centers for Disease Control and Pre-
- 13 vention and the Department of Defense, the Secretary
- 14 shall, subject to the availability of appropriations, estab-
- 15 lish and support short training courses in-country (not in
- 16 the United States) for health care providers and other
- 17 public health personnel from eligible developing countries
- 18 in techniques of syndrome surveillance reporting and rapid
- 19 analysis of syndrome information using Geographic Infor-
- 20 mation System (GIS) tools. Training under this subsection
- 21 may be conducted via the Internet or in appropriate facili-
- 22 ties as determined by the Secretary. The Secretary shall
- 23 coordinate such training courses, where appropriate, with
- 24 the existing programs and activities of the World Health
- 25 Organization.

1	SEC. 8. ASSISTANCE FOR THE PURCHASE AND MAINTE-			
2	NANCE OF PUBLIC HEALTH LABORATORY			
3	EQUIPMENT.			
4	(a) Authorization.—The President is authorized,			
5	on such terms and conditions as the President may deter-			
6	mine, to furnish assistance to eligible developing countries			
7	to purchase and maintain public health laboratory equip-			
8	ment described in subsection (b).			
9	(b) Equipment Covered.—Equipment described in			
10	this subsection is equipment that is—			
11	(1) appropriate, where possible, for use in the			
12	intended geographic area;			
13	(2) necessary to collect, analyze, and identify			
14	expeditiously a broad array of pathogens, including			
15	mutant strains, which may cause disease outbreaks			
16	or may be used as a biological weapon;			
17	(3) compatible with general standards set forth			
18	by the World Health Organization and, as appro-			
19	priate, the Centers for Disease Control and Preven-			
20	tion, to ensure interoperability with regional and			
21	international public health networks; and			
22	(4) not defense articles, defense services, or			
23	training as defined under the Arms Export Control			
24	Act.			
25	(c) Rule of Construction.—Nothing in this sec-			
26	tion shall be construed to exempt the exporting of goods			

- 1 and technology from compliance with applicable provisions
- 2 of the Export Administration Act of 1979 (or successor
- 3 statutes).
- 4 (d) Limitation.—Amounts appropriated to carry
- 5 out this section shall not be made available for the pur-
- 6 chase from a foreign country of equipment that, if made
- 7 in the United States, would be subject to the Arms Export
- 8 Control Act or likely be barred or subject to special condi-
- 9 tions under the Export Administration Act of 1979 (or
- 10 successor statutes).
- 11 (e) Procurement Preference.—In the use of
- 12 grant funds authorized under subsection (a), preference
- 13 should be given to the purchase of equipment of United
- 14 States manufacture. The use of amounts appropriated to
- 15 carry out this section shall be subject to section 604 of
- 16 the Foreign Assistance Act of 1961.
- 17 (f) Host Country's Commitments.—The assist-
- 18 ance provided under this section shall be contingent upon
- 19 the host country's commitment to provide the resources,
- 20 infrastructure, and other assets required to house, main-
- 21 tain, support, secure, and maximize use of this equipment
- 22 and appropriate technical personnel.

1	SEC. 9. ASSISTANCE FOR IMPROVED COMMUNICATION OF				
2	PUBLIC HEALTH INFORMATION.				
3	(a) Assistance for Purchase of Communication				
4	EQUIPMENT AND INFORMATION TECHNOLOGY.—The				
5	President is authorized to provide, on such terms and con-				
6	ditions as the President may determine, assistance to eligi-				
7	ble developing countries for the purchase and maintenance				
8	of communications equipment and information technology				
9	described in subsection (b), and supporting equipment,				
10	necessary to effectively collect, analyze, and transmit pub-				
11	lic health information.				
12	(b) COVERED EQUIPMENT.—Equipment described in				
13	this subsection is equipment that—				
14	(1) is suitable for use under the particular con-				
15	ditions of the area of intended use;				
16	(2) meets appropriate World Health Organiza-				
17	tion standards to ensure interoperability with like				
18	equipment of other countries and international orga-				
19	nizations; and				
20	(3) is not defense articles, defense services, or				
21	training as defined under the Arms Export Control				
22	Act.				
23	(c) Rule of Construction.—Nothing in this sec-				
24	tion shall be construed to exempt the exporting of goods				
25	and technology from compliance with applicable provisions				

- 1 of the Export Administration Act of 1979 (or successor
- 2 statutes).
- 3 (d) Limitation.—Amounts appropriated to carry
- 4 out this section shall not be made available for the pur-
- 5 chase from a foreign country of equipment that, if made
- 6 in the United States, would be subject to the Arms Export
- 7 Control Act or likely be barred or subject to special condi-
- 8 tions under the Export Administration Act of 1979 (or
- 9 successor statutes).
- 10 (e) Procurement Preference.—In the use of
- 11 grant funds under subsection (a), preference should be
- 12 given to the purchase of communications (and information
- 13 technology) equipment of United States manufacture. The
- 14 use of amounts appropriated to carry out this section shall
- 15 be subject to section 604 of the Foreign Assistance Act
- 16 of 1961.
- 17 (f) Assistance for Standardization of Report-
- 18 ING.—The President is authorized to provide, on such
- 19 terms and conditions as the President may determine,
- 20 technical assistance and grant assistance to international
- 21 health organizations (including regional international
- 22 health organizations) to facilitate standardization in the
- 23 reporting of public health information between and among
- 24 developing countries and international health organiza-
- 25 tions.

- 1 (g) Host Country's Commitments.—The assist-
- 2 ance provided under this section shall be contingent upon
- 3 the host country's commitment to provide the resources,
- 4 infrastructure, and other assets required to house, sup-
- 5 port, maintain, secure, and maximize use of this equip-
- 6 ment and appropriate technical personnel.
- 7 SEC. 10. ASSIGNMENT OF PUBLIC HEALTH PERSONNEL TO
- 8 UNITED STATES MISSIONS AND INTER-
- 9 NATIONAL ORGANIZATIONS.
- 10 (a) In General.—Upon the request of a United
- 11 States chief of diplomatic mission or an international
- 12 health organization, and with the concurrence of the Sec-
- 13 retary of State, the head of a Federal agency may assign
- 14 to the respective United States mission or organization
- 15 any officer or employee of the agency occupying a public
- 16 health position within the agency for the purpose of en-
- 17 hancing disease and pathogen surveillance efforts in devel-
- 18 oping countries.
- 19 (b) Reimbursement.—The costs incurred by a Fed-
- 20 eral agency by reason of the detail of personnel under sub-
- 21 section (a) may be reimbursed to that agency out of the
- 22 applicable appropriations account of the Department of
- 23 State if the Secretary determines that the relevant agency
- 24 may otherwise be unable to assign such personnel on a
- 25 non-reimbursable basis.

1	SEC. 11. LABORATORY-TO-LABORATORY EXCHANGE PRO-				
2	GRAM.				
3	(a) AUTHORITY.—The head of a Federal agency, with				
4	the concurrence of the Secretary, is authorized to provide				
5	by grant, contract, or otherwise for educational exchanges				
6	by financing educational activities—				
7	(1) of United States public health personnel in				
8	approved public health and research laboratories in				
9	eligible developing countries; and				
10	(2) of public health personnel of eligible devel-				
11	oping countries in United States public health and				
12	research laboratories.				
13	(b) Approved Public Health Laboratories De-				
14	FINED.—In this section, the term "approved public health				
15	and research laboratories" means non-United States Gov-				
16	ernment affiliated public health laboratories that the Sec-				
17	retary determines are well-established and have a dem-				
18	onstrated record of excellence.				
19	SEC. 12. EXPANSION OF CERTAIN UNITED STATES GOVERN-				
20	MENT LABORATORIES ABROAD.				
21	(a) In General.—Subject to the availability of ap-				
22	propriations, the Centers for Disease Control and Preven-				
23	tion and the Department of Defense shall each—				
24	(1) increase the number of personnel assigned				
25	to laboratories of the Centers or the Department, as				
26	appropriate, located in eligible developing countries				

1	that conduct research and other activities with re-						
2	spect to infectious diseases; and						
3	(2) expand the operations of those laboratories,						
4	especially with respect to the implementation of on-						
5	site training of foreign nationals and activities af-						
6	fecting neighboring countries.						
7	(b) Cooperation and Coordination between						
8	Laboratories.—Subsection (a) shall be carried out in						
9	such a manner as to foster cooperation and avoid duplica-						
10	tion between and among laboratories.						
11	(c) Relation to Core Missions and Security.—						
12	The expansion of the operations of overseas laboratories						
13	of the Centers or the Department under this section shall						
14	not—						
15	(1) detract from the established core missions						
16	of the laboratories; or						
17	(2) compromise the security of those labora-						
18	tories, as well as their research, equipment, exper-						
19	tise, and materials.						
20	SEC. 13. ASSISTANCE FOR REGIONAL HEALTH NETWORKS						
21	AND EXPANSION OF FOREIGN EPIDEMI-						
22	OLOGY TRAINING PROGRAMS.						
23	(a) Authority.—The President is authorized, on						
24	such terms and conditions as the President may deter-						
25	mine, to provide assistance for the purposes of—						

1	(1) enhancing the surveillance and reporting ca-
2	pabilities for the World Health Organization and ex-
3	isting regional health networks; and
4	(2) developing new regional health networks.
5	(b) Expansion of Foreign Epidemiology Train-
6	ING PROGRAMS.—The Secretary of Health and Human
7	Services is authorized to establish new country or regional
8	Foreign Epidemiology Training Programs in eligible devel-
9	oping countries.
10	SEC. 14. AUTHORIZATION OF APPROPRIATIONS.
11	(a) Authorization of Appropriations.—
12	(1) In general.—Subject to subsection (c),
13	there are authorized to be appropriated \$70,000,000
14	for the fiscal year 2003 and \$80,000,000 for fiscal
15	year 2004, to carry out this Act.
16	(2) Allocation of funds.—Of the amounts
17	made available under paragraph (1)—
18	(A) $$50,000,000$ for the fiscal year 2003
19	and $$50,000,000$ for the fiscal year 2004 are
20	authorized to be available to carry out sections
21	6, 7, 8, and 9;
22	(B) not more than $$2,000,000$ shall be
23	available for each of the fiscal years 2003 and
24	2004 for the specific training programs author-
25	ized in section 6. of which not more than

1	\$500,000 shall be available to carry out sub-
2	section (a)(1) of such section and not more
3	than \$1,500,000 shall be available to carry out
4	subsection (a)(2) of such section;
5	(C) $$5,000,000$ for the fiscal year 2003
6	and $$5,000,000$ for the fiscal year 2004 are au-
7	thorized to be available to carry out section 10;
8	(D) $$2,000,000$ for the fiscal year 2003
9	and $$2,000,000$ for the fiscal year 2004 are au-
10	thorized to be available to carry out section 11;
11	(E) $\$8,000,000$ for the fiscal year 2003
12	and $$18,000,000$ for the fiscal year 2004 are
13	authorized to be available to carry out section
14	12; and
15	(F) $$5,000,000$ for the fiscal year 2003
16	and $$5,000,000$ for the fiscal year 2004 are au-
17	thorized to be available to carry out section 13.
18	(b) AVAILABILITY OF FUNDS.—The amount appro-
19	priated pursuant to subsection (a) is authorized to remain
20	available until expended.
21	(c) Reporting Requirement.—
22	(1) Report.—Not later than 90 days after the
23	date of enactment of this Act, the Secretary shall
24	submit a report, in conjunction with the Secretary of

1	Health and Human Services and the Secretary of				
2	Defense, containing—				
3	(A) a description of the implementation of				
4	programs under this Act; and				
5	(B) an estimate of the level of funding re-				
6	quired to carry out those programs at a suffi-				
7	cient level.				
8	(2) Limitation on obligation of funds.—				
9	Not more than 10 percent of the amount appro-				
10	priated pursuant to subsection (a) may be obligated				
11	before the date on which a report is submitted, or				
12	required to be submitted, whichever first occurs,				
13	under paragraph (1).				

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A BILL

To provide for global pathogen surveillance and response.

May 23, 2002

Reported without amendment